2003

Virginia Department of Transportation Daily Traffic Volume Estimates Including Vehicle Classification Estimates

where available

Special Locality Report 340

Town of Castlewood

Prepared By

Virginia Department of Transportation Mobility Management Division

In Cooperation With

U.S. Department of Transportation Federal Highway Administration

Virginia Department of Transportation Mobility Management Division Traffic Monitoring Section

The Virginia Department of Transportation (VDOT) conducts a program where traffic count data are gathered from sensors in or along streets and highways and other sources. From these data, estimates of the average number of vehicles that traveled each segment of road are calculated. VDOT periodically publishes booklets listing these estimates.

One of these booklets, titled "Average Daily Traffic Volumes with Vehicle Classification Data, on Interstate, Arterial and Primary Routes" includes a list of each Interstate and Primary highway segment with the estimated Annual Average Daily Traffic (AADT) for that segment. AADT is the total annual traffic estimate divided by the number of days in the year. This booklet also includes information such as estimates of the percentage of the AADT made up by 6 different vehicle types, ranging from cars to double trailer trucks; estimated Annual Average Weekday Traffic (AAWDT), which is the number of vehicles estimated to have traveled the segment of highway during a 24 hour weekday averaged over the year; as well as Peak Hour and Peak Direction factors used by planners to formulate design criteria.

In addition to the Primary and Interstate publication, one hundred books are published periodically, one for each of 100 areas across the state defined by VDOT for record-keeping purposes. These books include traffic volume estimates for roads within the county, cities, and towns within the area. These books are titled "Daily Traffic Volumes Including Vehicle Classification Estimates, where available; Jurisdiction Report numbers 00 through 99".

Also available are a number of reports summarizing the average Vehicle Miles Traveled (VMT) in selected jurisdictions and other categories of highways. There are many different ways to present traffic volume summary information. Because the user determines the value of each presentation, the reports have been redesigned based on user requests and feedback. The people at VDOT Mobility Management's Traffic Monitoring Section who produce these books welcome requests for other helpful ways of presenting the summary information.

A compact disc (CD) is available that includes files in the Adobe® Portable Document Format (PDF) that can be displayed, searched, and printed using common desktop computer equipment. The CD includes the publications described above as well as a number of other reports, including specialized VMT summaries and smaller AADT reports for each city and town separately.

Publication Notes

Parallel Roads

For road inventory and management purposes, some roadways are counted separately by direction and have separately published traffic estimates for each direction of travel. Examples of such roadways are the interstate system and routes with separated facilities and (usually) one-way traffic facilities in urban areas. In these publications, they are referred to as parallel roads. As a convenience for the users of the publication, the listing for segments of roads with parallel segments are published with both the traffic estimates for their own direction of travel (e.g. I-95 Northbound) as well as the estimate of the total of all traffic on the same route including parallel roadways (all directions of I-95). The publication will have a "Combined Traffic Estimates for Parallel Roadways on this Route" or "Combined Traffic" identifiers for the combined direction of travel estimates.

Roadways such as I-395 with a North segment, a South segment and a separate Reversible lane segment will have the estimate for more than two parallel roadways included in the entire combined traffic estimate.

Some routes have very complicated paths through cities and towns. These parallel paths may be too complex to allow a relationship between nearby sections of the opposite direction on the same route. In this case, to indicate that the traffic estimates for such a road segment may not include all directions of traffic on that route, the line that would list the combined values will indicate "NA" for not available.

VDOT's traffic monitoring program includes more than 100,000 segments of roads and highways ranging from several mile sections of Interstate highways to very short sections of city streets. Due to problems experienced obtaining some traffic count data, and the level of quality necessary to maintain confidence in the data, no estimate is currently available for some segments of roadway. These segments are included in the publications indicating "NA" for not available. It is the intention of the VDOT's Mobility Management Traffic Monitoring group to obtain the data necessary and to report traffic volume estimates on all road segments included in these publications.

Many of the road segments in this program are local secondary roads. The amount and detail of data collected on these roads are not as great as the data collected on higher volume roads. The vehicle classification, average weekday traffic volumes, and the theoretical design hour traffic volumes are not calculated for these roads. The publications indicate "NA" for the information that is not available.

This publication is based on a traffic monitoring program initiated in 1997. Because the data collection techniques and statistical evaluation processes are different than those used in previous years, comparison with previous publications may be misleading.

Glossary of Terms:

Route: The Route Number assigned to this segment of roadway with the master inventory route number if this is an overlapping route, with official street or highway name if available.

Length: Length of the traffic segment in miles.

AADT: Annual Average Daily Traffic. The estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over the period of one year.

QA: Quality of AADT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- H Historical Estimate
- M Manual Uncounted Estimate
- N AADT of Similar Neighboring Traffic Link
- O Provided By External Source
- R Raw Traffic Count, Unfactored

4Tire: Percentage of the traffic volume made up of motorcycles, passenger cars, vans and pickup trucks.

Bus: Percentage of the traffic volume made up of busses.

2Axle Truck: Percentage of the traffic volume made up of 2 axle single unit trucks (not including pickups and vans).

3+Axle Truck: Percentage of the traffic volume made up of single unit trucks with three or more axles

1Trail Truck: Percentage of the traffic volume made up of units with a single trailer.

2Trail Truck: Percentage of the traffic volume made up of units with more than one trailer.

QC: Quality of Classification Data:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- C Short Term Classified Traffic Count Data
- F Factored Short Term Traffic Count Data
- H Historical Estimate
- M Mass Collective Average
- N Classification Estimates of Similar Neighboring Traffic Link

K Factor: The estimate of the portion of the traffic volume traveling during the peak hour or design hour.

QK: Quality of the Peak Hour estimate:

- A Factor based on 30th Highest Hour Observed During at least 250 days of Continuous Traffic Data
- B Factor based on other Hour Observed During Less than 250 days of Continuous Traffic Data
- Factor based on Highest Hour Collected at in a 48 Hour Weekday Period
- M Factor based on Manual Estimate of design hour
- N Peak Hour Factor of Similar Neighboring Traffic Link
- O Provided by External Source

Dir Factor: The estimate of the portion of the traffic volume traveling in the peak direction during the peak hour..

AAWDT: Average Annual Weekday Traffic. The estimate of typical traffic over the period of one year for the days between Monday through Thursday inclusive.

QW: Quality of AAWDT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- M Manual Uncounted Estimate
- N AAWDT of Similar Neighboring Traffic Link
- O Provided by External Source

Year: Year for which the published values are appropriate. If the Quality of AADT (QA) is "R", the year is the year that the raw traffic count was collected, and if available,

Route Shield Legend

Route Systems

North
81 Interstate Route Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.

(29) US Route

7 Virginia State Route

(600) Secondary Route

Special Routes

Bus Bus - Business Route
Bypas - Bypass Route
Truck - Truck Route
ALT ALT - Alternate Route
Wve - Wve Route connector

P - Parallel Route; Southbound or Westbound direction lanes of a numbered route where they are on a different road facility than the other direction.

The VDOT Maintainenance Jurisdiction number is displayed below the Secondary Route Number if the Maintenance Jurisdiction is different than the jurisdiction in the title of the report.

						TOWIT OF Castley	voou								
Route	Length	AADT	QA	4Tire	Bus	Tri 2Axle 3+Axle			()(:	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Castlewood				From:		Wine Countril		1							
ALT	2.56	13000	Α	93%	0%	Wise County Lin	3%	0%	С	0.101	Α	0.524	13000	Α	2003
[58]	2.00	10000	,,		070		070		Ü	0.101	,,	0.02	10000	, ,	2000
ALT 58				From:		SR 65								_	
58	1.04	9800	G	93% To:	0%	1% 1%	3%	0%	F	0.077	F	0.510	10000	G	2003
				From:		WCL Castlewoo									
	1.50	5800	G	95%	1%	Russell County L 2% 1%	ne 2%	0%	F	0.084	F	0.602	5900	G	2003
63	1.00	0000	Ū	To:	170	NCL Castlewoo		070	•	0.004	•	0.002	0000	Ü	2000
				From:		WCL Castlewoo									
65	3.02	1100	N	90%	0%	1% 7%	2%	0%	Ν	0.087	Ν	0.519	1200	Ν	2003
				To:	Ţ	US 58 ALT Banners	Corner								
				From:		SCL Castlewoo	d								
611 683	0.63	490	N							NA			NA		1999
				To: From:		WCL Castlewoo	od								
611)	0.28	490	R			SR 65 EAST				NA			NA		1999
(611) (831)	0.20	400		To:		WCL Castlewoo	od			147 (14/ (1000
				From:		83-683		ĺ							
(615)	0.40	310	G	91%	1%	2% 2%	5%	0%	F	0.105	F	0.638	320	G	2003
83				To:		83-695									
615	1.66	590	G	91%	1%	2% 2%	5%	0%	F	0.105	F	0.580	590	G	2003
615				To:	.,,		0,0		•	01.00	•	0.000		Ū	
615	0.12	110	N	From: 91%	1%	83-628 WEST 2% 2%	5%	0%	N	0.130	N	0.625	110	N	2003
615	0.12	110	14	To:	1 /0	ECL Castlewoo		070	11	0.100	14	0.020	110	11	2000
				From:		Wise County Lin									
628	1.59	680	R	<u> </u>		Wise County En	10			NA			NA		1999
				To:		83-615 SOUTH	I								
				From:		US 58 ALT		Ī							
640	2.46	1200	R							NA			NA		1999
63)				To: From:		83-615 NORTH									
640	0.84	860	G	97%	0%	83-615 SOUTE 2% 0%	0%	0%	С	0.091	F	0.622	870	G	2003
640	0.04	000	Ū	77. To	070		0 70		J	0.001	•	0.022	070	Ü	2000
640	0.27	400	G	From: 97%	0%	83-1075 2% 0%	0%	0%	F	0.099	F	0.581	410	G	2003
(640)	0.27	400	G	9170	070		070	070	Г	0.099	г	0.361	410	G	2003
	0.44	220		From:	00/	83-1070	00/	00/		0.400		0.000	220		2002
640	0.14	330	G	97% To:	0%	2% 0% ECL Castlewoo	0% d	0%	F	0.100	F	0.639	330	G	2003
				From:		ECL Castlewoo									
(660)	0.40	60	R			ECL Castlewoo	u			NA			NA		09/19/200
669	0.10		•••	To:		83-683				10.			10.		00/10/200/
				From:		WCL Castlewoo	nd								
682	0.80	460	N			WCE Custic woo	Α			NA			NA		1999
				To:		SR 65 EAST									
			_	From:		SR 65 MID									10/01/000
682	3.70	80	R	To:		SR 65 WEST				NA			NA		10/04/2002
(202)	1.04	2500	G	97%	2%	US 58 ALT WES	ST 1%	0%	F	0.090	F	0.550	2500	G	2003
683	1.04	2000	3	F	2 /0		1 /0	U /0	'	0.030	'	0.550	2500	J	2000
	0.04	1000	•	97%	20/	83-787	10/	00/		0.004	F	0.506	1000		2002
(683)	0.04	1800	G	JI 70	2%	1% 0%	1%	0%	F	0.091	г	0.506	1800	G	2003
	2 :2	4=00		From:	001	83-786	401			0.000		0.544	1700		2022
(683)	0.46	1700	G	97%	2%	1% 0%	1%	0%	F	0.093	F	0.511	1700	G	2003
6 <u>8</u> 3 6 <u>8</u> 3 6 <u>8</u> 3				To: From:		83-695									
(683)	0.36	420	G	97%	2%	1% 0%	1%	0%	F	0.146	F	0.671	430	G	2003
				To:		83-615 New									

						100011010										
Route	Length	AADT	QA	4Tire	Bus	2Axle 3				α	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Castlewood				From:					i							
683	0.36	490	G	97%	2%	83-61: 1%	0%	1%	0%	F	0.142	F	0.715	500	G	2003
				To: From:		83-	669									
683	0.57	300	G	97%	2%	1%	0%	1%	0%	С	0.099	F	0.548	300	G	2003
				To: From:		SCL Ca										
694)	1.73	220	R	r toin.		US 58	SALI				NA			NA		1999
				To:		83-61	5 New									
695				From:		83-	683									
	0.12	1100	R	To:		92.61	5 New		1		NA			NA		1999
				From:		SCL Cas										
731	0.61	40	R			SCE Cu	stie wood	•	<u>.</u>		NA			NA		10/04/200
83				To:		SCL Ca	stlewood									
\bigcirc				From:		SR	. 63									10/01/000
739	0.35	240	R								NA			NA		10/04/2002
	0.05	50	R	From:		83-	807				NA			NA		1999
739	0.03	30	K	To:		0.053.0	2 02 007		-		INA			INA		1999
739	0.06	10	R	From:		0.05 ME	E 83-807				NA			NA		10/04/200
(189)				To:		Deac	d End									
				From:		SR	65									
748	0.14	70	R	To			15.1		-		NA			NA		10/04/200
				From:			d End									
750	0.11	40	R	1.0		0.11 MV	V 83-613				NA			NA		10/04/200
(180)	0.11			To:		83-61	5 New		1							
_	0.10	70	R	From:		05 01	3 1 CW				NA			NA		10/04/200
				To		0.10 MI	E 83-615									
\bigcirc	0.27	222	R	From:		SR	65				NΙΛ			NIA		10/04/2002
755	0.27	220	ĸ	To:		End	Loop				NA			NA		10/04/200
				From:		Dead										
762	0.06	30	R								NA			NA		10/04/200
837				To:		SR	. 63									
	0.70	220		From:		Cul-d	le-Sac				NIA			NIA		10/04/2002
766	0.73	320	R	To:		US 58	8 ALT				NA			NA		10/04/200
				From:			683									
786	0.09	70	R								NA			NA		1992
				To:			787									
	0.04	160	R	From:		83-	683				NA			NA		1986
787	0.04	100	IX.	To:		02	700		-		INA			INA		1900
787	0.04	120	R	From:		83-	788				NA			NA		1986
191)				To:		83-	789									
787	0.12	60	R	From:		03-	,0,			· <u> </u>	NA	_		NA		1986
				To:		83-	786									
	2.25		_	From:		83-	787									1000
788	80.0	60	R	To:		02	786				NA			NA		1986
				From:			d End		<u>l</u>							
789	0.05	70	R			Deac	ı EHQ				NA			NA		1986
(183)				To		83-	787									

					TOWIT OF Castlewood			
Route	Length	AADT	QA	4Tire	Bus 2Axle 3+Axle 1Trail 2Trail	K D Factor Fac	\(\lambda \la	W Year
Town of Castlewood				From:	83-739			
807	0.20	80	R		83-139	NA	NA	10/04/2002
(83)				To:	Dead End			
\bigcirc	0.00	50		From:	Dead End	NIA	NIA	40/04/000/
809	0.22	50	R			NA	NA	10/04/2002
809	0.26	280	R	From:	83-810	NA	NA	1992
	0.20	200		To:	83-640	10/1	101	1002
				From:	US 58 ALT			
810	0.09	410	R		22.000	NA	NA	10/04/200
				To: From:	83-809			
811	0.13	690	R	rioin.	US 58 ALT SOUTH	NA NA	NA	10/04/200
0831				To	83-760			
				From:	Dead End			
813	0.14	260	R	To:	GD (2	NA	NA	10/04/200
				From:	SR 63			
828	0.32	90	R		SR 65	NA NA	NA	10/04/2002
020				To:	SR 65			
840				From:	Dead End			
	0.20	120	R	To:	CD (5	NA I	NA	10/04/200
				From:	SR 65 Dead End			
849	0.08	30	R		Dead End	NA	NA	1992
				To	US 58 ALT			
\sim				From:	83-683			
859	0.10	40	R	To	D-JE-J	NA I	NA	1999
				From:	Dead End Dead End			
860	0.62	830	R		Dead End	NA	NA	10/04/200
				To:	83-683			
861			_	From:	Dead End			
	0.45	190	R	To:	83-860	NA	NA	1999
				From:	83-683			
862 883	0.15	280	R	<u> </u>	65 005	NA	NA	1999
				To:	Dead End			
864 83	0.00	470		From:	83-815	NIA	NIA	4004
	0.20	170	R	To:	83-866	NA I	NA	1994
_				From:	Dead End			
865	0.21	60	R			NA	NA	1994
				To:	83-615 New			
866	0.00	NA		From:	83-864	NIA	NIA	
	0.20	NA		To:	Dead End	NA I	NA	
				From:	83-615 New			
868	0.06	NA		_		NA	NA	
				To:	Dead End			
\bigcirc	0.14	N/A		From:	Dead End	NIA		
900	0.14	NA		To	83-640	NA I	NA	
				From:	Dead End			
(1070) 83	0.05	140	R	_		NA	NA	09/19/2002
8.5				To	0.06 MN Dead End			

Route	Length	AADT	QA	4Tire	BusTruck 2Axle 3+Axle 1Trail 2Trail	OC OK	Dir AAWDT Factor	QW Year
Town of Castlewood				From:	0.06 MN Dead End			
1070	0.27	210	R		o.oo nay bead bad	NA	NA	09/19/2002
8.3				Tn·	83-640			
\bigcirc	0.05	20	_	From:	Dead End	NA	NIA	1000
(1073)	0.05	30	R	To:	83-1070	NA	NA	1999
				From:	Begin Loop			
1074	0.55	NA			-	NA	NA	
6.5				To:	83-640			
	0.05	240	R	From:	Dead End	NIA	NA	00/40/2003
1075	0.25	310	ĸ	To:	83-640	NA	NA	09/19/2002
				From:	83-1070			
1078	0.20	130	R	_		NA	NA	1999
				To:	83-1075			
	0.00	2000	_	From:	Castlewood Sch	NIA	NIA	1001
9448	0.20	2000	R	To:	83-683	NA	NA	1991
				From:	SR 63 NORTH			
628	0.20	940	R			NA	NA	1997
91)				To-	NCL Castlewood			